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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/644,274	08/20/2003	Michael Stephen Boger	740789-054350	5179

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EXAMINER

GARCIA, JOANNIE A

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/644,274

Applicant(s)

BOGER ET AL

Examiner

Joannie A. Garcia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 20-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 1-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06-03-05, 01-02-04, 12-01-03</u> | 6) <input type="checkbox"/> Other: _____ |

Applicant's election without traverse of Group I, claims 1-19, in the reply filed on 01-28-05 is acknowledged.

The disclosure is objected to because of the following informalities: On page 3, line 22, on page 5, line 2, on page 8, line 10, on page 9, lines 12, 14, and 16, on page 13, lines 13, 15, and 18, "polarization" should be replaced with --polarization--.

Appropriate correction is required.

Claims 1-19 are objected to because of the following informalities:

Claim 1 recites the limitation "area of illumination" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "same order" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "illuminating radiation" in line 12. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "light beam reflected" in lines 14-15. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "desired endpoint" in line 18. There is insufficient antecedent basis for this limitation in the claim.

The term "desired" in claim 1 is a relative term, which renders the claim indefinite. The term "desired" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably

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apprised of the scope of the invention. If applicant intends a particular endpoint, it should be clearly recited.

The term "desired" in claim 3 is a relative term, which renders the claim indefinite. The term "desired" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. If applicant intends a particular article, it should be clearly recited.

Claim 9 recites the limitation "oscillation information" in line 2. There is insufficient antecedent basis for this limitation in the claim.

The term "predicted" in claim 9 is a relative term, which renders the claim indefinite. The term "predicted" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. If applicant intends a particular behavior, it should be clearly recited.

Claim 10 recites the limitation "process critical features" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "design of the features" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "three dimensions" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "overall component" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "optical properties" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 10 recites the limitation "materials" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "behavior of the illuminating radiation" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 11 recites the limitation "interference" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "illumination means" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 14 recites the limitation "material being examined" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 15 recites the limitation "detected signals" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 16 recites the limitation "etch feature" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 17 recites the limitation "spectrally narrow illumination source" in line 1. There is insufficient antecedent basis for this limitation in the claim.

The term "narrow" in claim 17 is a relative term, which renders the claim indefinite. The term "narrow" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably

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apprised of the scope of the invention. If applicant intends a particular illumination source, it should be clearly recited.

Appropriate correction is required.

Claims 2-19 would be allowable if rewritten to overcome the objection(s) set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 1 would be allowable if rewritten or amended to overcome the objection(s) set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joannie García whose telephone number is (571) 272-1861. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith, can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



George Fourson
Primary Examiner
Art Unit 2823



JAG

July 21, 2005

GFourson
Primary Examiner